

AMENDMENTS

Amendments to the Claims:

The following listing of claims replaces all previous listings or versions thereof:

- 1.-44. (canceled)
45. (currently amended) An isolated polypeptide comprising the amino acid sequence $\text{PIH}^{\text{L}}/\text{R XVHW}$ wherein X is a glycine[,], or lysine ~~or glutamic acid~~.
46. (currently amended) The isolated polypeptide of claim 45, comprising at least 25 contiguous amino acid residues of SEQ ID NO: 2[,], or SEQ ID NO: 8, ~~or SEQ ID NO: 10~~.
47. (currently amended) The isolated polypeptide of claim 45, comprising at least 50 contiguous amino acid residues of SEQ ID NO: 2[,], or SEQ ID NO: 8, ~~or SEQ ID NO: 10~~.
48. (currently amended) The isolated polypeptide of claim 45, comprising at least 100 contiguous amino acid residues of SEQ ID NO: 2[,], or SEQ ID NO: 8, ~~or SEQ ID NO: 10~~.
49. (currently amended) The isolated polypeptide of claim 45, comprising at least 150 contiguous amino acid residues of SEQ ID NO: 2[,], or SEQ ID NO: 8, ~~or SEQ ID NO: 10~~.
50. (currently amended) The isolated polypeptide of claim 45, comprising at least 200 contiguous amino acid residues of SEQ ID NO: 2[,], or SEQ ID NO: 8, ~~or SEQ ID NO: 10~~.
51. (withdrawn) The isolated polypeptide of claim 48, further comprising amino acid residues 400 to 509 of SEQ ID NO: 8.
52. (canceled)

- 53. (canceled) The isolated polypeptide of claim 48, further comprising amino acid residues 461 to 568 of SEQ ID NO: 10.
- 54. (currently amended) The isolated polypeptide of claim 45, comprising SEQ ID NO: 2[,] or SEQ ID NO: 8, ~~or SEQ ID NO: 10.~~
- 55. (currently amended) An isolated polypeptide comprising at least 130 ~~25~~ contiguous amino acids of SEQ ID NO: 2.
- 56. (canceled)
- 57. (canceled) The isolated polypeptide of claim 55, comprising at least 50 contiguous amino acids of SEQ ID NO: 2.
- 58. (currently amended) The isolated polypeptide of claim 55, comprising at least 170 ~~100~~ contiguous amino acids of SEQ ID NO: 2.
- 59. (previously presented) The isolated polypeptide of claim 55, comprising at least 150 contiguous amino acids of SEQ ID NO: 2.
- 60. (previously presented) The isolated polypeptide of claim 55, comprising at least 200 contiguous amino acids of SEQ ID NO: 2.
- 61. (canceled)
- 62. (canceled)
- 63. (previously presented) The isolated polypeptide of claim 55, wherein the polypeptide comprises SEQ ID NO: 2.
- 64. (canceled)
- 65. (canceled)
- 66. (previously presented) A method of purifying the polypeptide of claim 55 from a sample comprising collecting a sentrin-specific protease polypeptide sample; incubating the

sample with an antibody that specifically binds the SENP1 polypeptide; and obtaining the SENP1 polypeptide.

67. (previously presented) The method of claim 64, wherein the purified SENP1 polypeptide comprises the amino acid sequence of SEQ ID NO: 2.
68. (currently amended) The isolated polypeptide of claim 45, comprising the amino acid sequence PIHLGVHW[,] or PIHRKVHW, ~~or PIHLEVHW.~~